

response be accepted as a bona fide effort to meet any potential response requirements outstanding and due in the above captioned matter.

Please amend the application as follows: IN THE CLAIMS:

### **CLEAN VERSION OF THE AMENDED CLAIMS**

1. (amended) Reaction chambers coated with native, synthetically or enzymatically prepared nucleic acids, wherein said coating is performed non-covalently with a calibrated nucleic acid at the surface of the inner walls of reaction chambers which surface of the inner walls does not require any chemical nor biochemical modification prior to coating , which reaction chambers are storable without problems for a prolonged period of time with unchanged quality.

2. (amended) Reaction chambers according to claim 1, wherein they are comprised of glass or plastic vessels or of glass capillaries , and wherein they are useable for kits.

3. (amended) Reaction chambers according to claim 1, wherein DNA, RNA, synthetic equivalents of DNA and/or RNA, as well as dU-containing DNA after calibration are used as calibrated nucleic acids.

4. (amended) Reaction chambers according to claim 1, further comprising

- a) for dilution of DNA standards, a DNA solution is used comprising a nucleic acid compound having a minimum sequence homology to the nucleic acid compound to be analyzed, and
- b) a tRNA solution is used for [the] dilution of the RNA standards.

5. (amended) Reaction chambers according to claim 1, further comprising carrier nucleic acid being DNA of the lambda phage which is converted into readily soluble

fragments of a mean length of about 1 - 2 kb by means of ultrašonic treatment, and wherein carrier nucleic acid is added to the calibrated nucleic acid, wherein the carrier nucleic acid generates an improved adsorption during a lyphilization process, an increased stability of the calibrated

nucleic acid in the reaction chambers, and serve for producing a thinning sequence out of the calibrated nucleic acid.

6. (amended) A method for the production of reaction chambers comprising

directly aliquoting calibrated standard nucleic acids and added carrier nucleic acid

into reaction chambers, and

subsequently non-covalently adsorbing the calibrated standard nucleic acids and added carrier nucleic acids directly in the inner wall of the reaction chamber

by means of freeze-drying or vacuum-centrifugating lyophilization.

8. (amended) Method according to claim 6 further comprising

using DNA, RNA, synthetic

equivalents and/or RNA, as well as dU-containing DNA as nucleic acids.

9. (amended) Method according to claim 6 further comprising

a) for the dilution of DNA

standards, a DNA solution is used comprising a nucleic acid having a minimum sequence

homology to the nucleic acid compound to be analyzed, and

b) a tRNA

solution is used for the dilution of the RNA standards.

11. (amended) Method according to claim 6 further comprising simultaneously coating, if necessary, reaction chambers with a multitude (i.e. at least two) of application-specific calibrated nucleic acids of different cellular or organic origin, or originating from different species.

12. (amended) Method according to claim 6, wherein said coating is performed of at

least 96 reaction chambers which are arranged in a microtiter format

and which comprise at least 12x 8-well strips containing carrier

nucleic acids and calibrated nucleic acids while an arbitrarily

chosen concentration of each calibrated nucleic acid differs stepwise

from well to well (highest concentration in A1-A12, lowest

concentration in H1-H12) in order to cover the entire concentration range of an analyte nucleic acid to be measured.

14. (amended) Method according to claim 6, wherein apart from the calibrated

standard nucleic acids, at least two oligonucleotides which are either 5'- and/or 3'- labeled with a fluorescent or

non-fluorescent chromophore or unlabeled, the carrier nucleic acid

and further components required for enzymatic nucleic acids

amplification are contained in the reaction chambers in a lyophilized

formulation, or at least two oligonucleotides, the carrier nucleic acid and

further components required for

enzymatic nucleic acids amplification are contained in separate

vessels without said standard nucleic acids in a lyophilized

formulation.

16. (amended) Method according to claim 15 further comprising

using test kits comprised of an octet strip of closed reaction chambers

coated with eight different nucleic acid concentrations of at least two

oligonucleotides, as well as one carrier nucleic acid and closed with a film / foil.

17. (amended) A method for producing reaction chambers comprising employing a chamber wherein calibrated standard nucleic acids and added carrier nucleic acids are directly aliquoted into the chamber, lyophilizing the calibrated standard nucleic acids and the added carrier nucleic acids by freeze-drying or vacuum-centrifugating; and non-covalently adsorbing directly the calibrated standard nucleic acids and the added carrier nucleic acids onto the inner wall of the chamber and thereby producing a reaction chamber.

18. (amended) The method according to claim 17 further comprising non-covalently adsorbing directly the calibrated standard nucleic acids and the added carrier nucleic acids onto plastic vessels or glass capillaries.

19. (amended) The method according to claim 17 further comprising employing DNA, RNA, synthetic equivalents and/or RNA, as well as dU containing DNA as calibrated standard nucleic acids.

20. (amended) The method according to claim 17 further comprising employing a DNA solution comprising a nucleic acid having a minimum sequence homology to the nucleic acid compound to be analyzed for a dilution of DNA standards, and employing a tRNA solution for a dilution of RNA standards.

21. (amended) The method according to claim 17 further comprising furnishing a carrier nucleic acid by employing a DNA of a lambda phage, and converting the DNA of the lambda phage into readily soluble fragments of a mean length of about 1 - 2 kb by means of ultrasonic treatment.

23. (amended) The method according to claim 17 further comprising performing coating of at least 96 reaction chambers which are arranged in a microtiter format and which comprise at least 12x 8-well strips containing carrier nucleic acids and calibrated nucleic acids while an arbitrarily chosen concentration of each calibrated nucleic acid differs stepwise from well to

well (highest concentration in A1-A12, lowest concentration in H1-H12) in order to cover the entire concentration range of an

25. (amended) The method according to claim 17 further comprising employing at least two oligonucleotide primers or probes which are either 5'- and/or 3'- labeled with a fluorescent or non-fluorescent chromophore or unlabeled apart from the calibrated standard nucleic acids;

containing the carrier nucleic acid and further components required for enzymatic nucleic acids amplification in the reaction chambers in a lyophilized formulation, or at least two oligonucleotide primers or probes; and

containing the carrier nucleic acid and further components required for enzymatic nucleic acids amplification in separate vessels without said standard nucleic acids in a lyophilized formulation.

27. (amended) The method according to claim 17 further comprising forming a test kit comprising an octet strip of closed reaction chambers coated with eight different nucleic acid concentrations of at least two



oligonucleotides, as well as one carrier nucleic acid and closed with a film / foil.

28. (amended) The method according to claim 17 further comprising forming a test kit comprising a strip of eight reaction vessels coated with eight different amounts of at least one calibrated standard nucleic acid, carrier nucleic acid and at least two oligonucleotides and which is sealed with an appropriate self-adhesive foil.

29. (amended) A reaction chamber obtained by employing a method for producing reaction chambers comprising  
employing a chamber wherein calibrated standard nucleic acids and added carrier nucleic acids are directly aliquoted into the chamber;  
lyophilizing the calibrated standard nucleic acids and the added carrier nucleic acids by freeze-drying or vacuum-centrifugating; and  
non-covalently adsorbing directly the calibrated standard nucleic acids and the added carrier nucleic acids onto the inner wall of the chamber and thereby producing a reaction chamber , wherein the reaction chamber is

suitable to be stored at room temperature for a period longer than a year without loss of quality.